What is claimed is:

1. A printing system, comprising:

a print engine for printing at a native resolution;

a bitmap for at least a portion of an image at a higher resolution, wherein said higher resolution is higher than the native resolution; and

a processing unit for using a window structure for processing the bitmap to generate output for controlling the print engine to produce a printed output that simulates the higher resolution.

2. The printing system as recited in claim 1 wherein the higher resolution is at least twice the native resolution of the printing system.

3. The printing system as recited in claim 1 wherein the printing system is a laser printer.

4. The printing system as recited in claim 3 wherein the printing system modulates a laser beam to print the bitmap at the higher resolution.

5. The printing system as recited in claim 1 wherein the window structure is comprised of a plurality of elements assigned in a matrix.

6. The printing system as recited in claim 1 wherein the window structure is a 3 x 4 matrix arrangement.

7. The printing system as recited in claim 5 wherein each of the elements in the matrix is assigned a weighted value.

8. The printing system as recited in claim 7 wherein the matrix exhibits a row relationship such that a sum of a summation of weighted values in a second row of the matrix and a summation of weighted values in a third row of the matrix are approximately equal to two times a sum of a summation of weighted values in a first row of the matrix with a summation of weighted values in a fourth row of the matrix.

9. The printing system as recited in claim 8 wherein the matrix exhibits a row symmetrical relationship such that the summation of the weighted values of the second row is approximately equal to the summation of the weighted values of the third row of the matrix and the summation of the weighted values of the first row is approximately equal to the summation of the weighted values of the fourth row of the matrix.

10. The printing system as recited in claim 8 wherein the matrix exhibits a coefficient symmetrical relationship such that a summation of weighted values in a second column if the matrix is approximately equal to a sum of a summation of weighted values in a first column of the matrix with a summation of weighted values in a third column of the matrix.

11. The printing system as recited in claim 10 wherein the matrix exhibits a coefficient relationship such that the summation of weighted values of the first column of the matrix is approximately equal to the summation of weighted values of the third column.

12. The printing system as recited in claim 10 wherein the matrix exhibits a diagonal relationship where diagonal elements in the matrix are constrained to their respective row and coefficient relationships.

13. The printing system as recited in claim 12 wherein the matrix exhibits a relationship wherein any arrangement in the window should not generate weighted values equal to the row, coefficients, and diagonal relationships.

14. In a printing system with a print engine for printing in a native resolution, a method for simulating printing at a higher resolution, the method comprising:

providing a bitmap for at least a portion of an image having the higher resolution, wherein the higher resolution is higher than the native resolution; and

using a window structure for processing the bitmap to generate output for controlling the print engine to produce a printed output that simulates the higher resolution.

15. The method as recited in claim 14 wherein said higher resolution is at least twice the native resolution.

16. The method as recited in claim 14 wherein the printing system is a laser printer.

17. The method as recited in claim 16 wherein the printing system modulates a laser beam to print an image.

18. The method as recited in claim 14 wherein the window structure is comprised of a plurality of elements assigned in a matrix.

19. The method as recited in claim 14 wherein the window structure is a 3 x 4 matrix arrangement.

20. The method as recited in claim 18 wherein each of the elements in the matrix is assigned weighted values.

21. The method as recited in claim 20 wherein the matrix exhibits a row relationship such that a sum of a summation of weighted values in a first row of the matrix and a summation of weighted values in a fourth row of the matrix are approximately equal to two times a sum of a summation of weighted values in a second row of the matrix with a summation of weighted values in a third row of the matrix.

22. The method as recited in claim 21 wherein the matrix exhibits a row symmetrical relationship such that the summation of the weighted values of the second row is

approximately equal to the summation of the weighted values of the third row of the matrix and the summation of the weighted values of the first row is approximately equal to the summation of the weighted values of the fourth row of the matrix.

23. The method as recited in claim 21 wherein the matrix exhibits a coefficient relationship such that a summation of weighted values in a second column if the matrix is approximately equal to a sum of a summation of weighted values in a first column of the matrix with a summation of weighted values in a third column of the matrix.

24. The method as recited in claim 23 wherein the matrix exhibits a coefficient symmetrical relationship such that the summation of weighted values of the first column of the matrix is approximately equal to the summation of weighted values of the third column.

25. The method as recited in claim 23 the matrix exhibits a diagonal relationship where diagonal elements in the matrix are constrained to their respective row and coefficient relationships.

26. The method as recited in claim 25 wherein the matrix exhibits a relationship wherein any arrangement in the window should not generate weighted values equal to the row, coefficients, and diagonal relationships.